Connecticut River Atlantic Salmon Commission
Turners Falls, Massachusetts
DRAFT Meeting Minutes
December 11, 2014

Agenda Items:

1. Determination of Quorum, Approval of Today's Agenda & Minutes of the June 19, 2014 Meeting (Hyatt)

Chair Mr. Bill Hyatt called the meeting to order at 10:10 a.m.

Mr. Hyatt opened the meeting, and the Commissioners and staff introduce themselves followed by the general audience. Mr. Lou Chirella was present to represent NOAA/NMFS. Commissioner Glenn Normandeau and Peter Basta were not present. Commissioner Normandeau arrived during the Coordinator's Report.

Mr. Hyatt, noted that Commissioner Wayne MacCallum has announced his plan to retire from the MA Division of Fisheries and Wildlife and that the Commission is very grateful for his many years of service to fisheries restoration. Mr. Hyatt noted that over his long tenure as a Director, he has served as Chair and Vice-Chair of CRASC and provided important leadership and cooperation to this Commission. Mr. Hyatt expanded on his many contributions. Mr. MacCallum thanked Mr. Hyatt and the Commission as he was given a plaque of appreciation.

The minutes of the last CRASC meeting on June 19, 2014 were reviewed. A motion to accept the minutes from that meeting was made, seconded, all were in favor.

2. Report of the Coordinator and TECH Shad / River Herring subcommittees (Sprankle)

Mr. Sprankle provided a handout and reviewed his Coordinator report, refer to attachment for details. Changes in fish passage counts since the June meeting were highlighted and discussed. Updates in eel passage counts were discussed for Holyoke Dam which set a record year, with eel trapping/movement extending into late October. The final count numbers for shad passed upstream of Turners Falls Dam (Gatehouse Ladder) were third-highest in the time series (since 1980). Shad passage at Vernon Dam Ladder was also the third highest in its time series. The shad count at Vernon (27,706) was 69.4% of the number passed at Gatehouse (39,914). More details on counts and rates were discussed along with variables of influence (such as river discharge). A review of summary sample data from the spring USFWS River Herring Population Assessment work was provided. The summary highlighted increased effort and substantial increases in river herring sampled, data gathered, and laboratory processed fish. The CTDEEP Juvenile Index Survey for River Herring reported a blueback herring index below the long-term mean but fairly consistent with values since the mid-1990s (a graph was provided). It was noted that there had been a conference call among agency biologists to discuss river herring restoration plans for the short-term and develop a brief document to describe this plan. A full Shad and River Herring subcommittee meeting is planned to occur in the winter to finalize plans and include a broader group. American shad transfers from Holyoke Fish Lift were not reported at the last meeting and a table showing details of that activity was reviewed. A total of 1,150 shad was trapped (HFL) and relocated for restoration with an additional 543 moved to Conte Lab for fish passage experiments. A meeting among agency biologist and researchers took place in July to discuss American shad population modeling efforts,

what had been done on Susquehanna and what may be done for the Connecticut River. The group identified some information gaps that led to the development and submittal of a USFWS Scientific Support Program grant to study shad energetics and spawning in relation to water temperatures and other variables by the Conte Lab (Dr. Steve McCormick and Dr.Ted Castro-Santos) using both field and lab components and to extend that field work to other river systems. That SSP proposal was approved and work is to begin in 2015 and continue over a 3-year period. In addition, Dr. Richard McBride (NOAA) provided important insight into shad fecundity and spawning which stimulated the need to re-examine Connecticut River shad data. Dr. McBride had collected samples in 2014 to begin this work but did not have the resources to examine the samples. He was developing a proposal for NOAA that if funded would provide a more rigorous examination of these questions and aid in the models development.

The program to rear juvenile shad at North Attleboro National Fish Hatchery for trials on planned FERC studies with Normandeau Associates (for TransCanada) and went very well. The hatchery staff did an excellent job rearing and delivering juveniles for river side studies in tanks at Vernon Dam. The studies provided critical information that led to decision to use wild juveniles and also a different radio tag type and application process for the 2015 studies.

Data from the CTDEEP American shad Juvenile Index (JI)Survey were reviewed. A figure showing the JI annual time series showed that the provisional 2014 value was quite high, much greater than the past 3 years and only slightly less than the very high 2010 value.

Other topics discussed include the Coordinator's fieldwork plans for river herring (same assessment and restoration transfers) plus the addition of monitoring for FERC radio tagged study fish downstream of study areas (Holyoke to lower river) in spring and summer of 2015. It was noted that Vermont Yankee was to be shutting down at the end of December and the Mount Tom Power Station has also been shut down, based upon news reports. Both plants had permits for water withdrawal and release of waste heat water that were of fishery management concern.

Mr. Sprankle closed the report with a request for a Commission vote on the matter of <u>not</u> requiring the Northfield Mountain Pumped Storage Facility to install their downstream smolt guidance net in the spring of 2015. The Technical Committee had determined that the nets deployment in 2015 had the potential to effect important shad migration and movement studies that will be part of the basis for long-term FERC license conditions. Commissioner MacCallum asked if there would be any important loss of information from not having the net deployed. Dr. Slater replied that there would not be and restated the value of it not being used. Commissioner Fisk made a motion to not require the nets use in 2015, it was seconded by Commissioner Normandeau, and all were in favor. Mr. Sprankle noted that he would notify all required parties (including FERC) of this decision and it would be noted in the Fish Passage Notification Letter in late winter.

Commissioner Fisk asked about the status of the Draft American Shad Status Report shared at the last meeting. Mr. Sprankle noted he had worked on it with others but it was not to ready for this meeting. Commissioner MacCallum asked about the Coordinator's stated concern of allowing the power companies use of his tank truck in the spring for their FERC shad studies given the conflict with river herring work. He suggested that if the two activities appear to conflict, the Coordinator should bring it to the attention of the Commissioners. Mr. Sprankle noted that the option of using a trailer system from another USFWS project was being explored.

A motion to accept the Coordinator's Report was made, seconded and all were in favor.

3. Report of the Technical Committee (Slater)

Dr. Slater provided a handout on the CRASC Technical Committee's meeting on November 3, 2014 and the various subcommittees activities with the exception of shad and river herring covered earlier. That hand out is included in its entirety here:

Salmon Subcommittee; Steve Gephard (CTDEEP)

Spring Stocking Summary

- All salmon fry were stocked by CTDEEP in Connecticut
- Total of 198,957 fry
- All eggs were produced at Kensington State Fish Hatchery but in addition to KSFH, 89,000 eggs were hatched at Tripp Streamside Incubation Facility and 7,000 were stocked out of Burlington State Trout Hatchery.
- Farmington River watershed=119,737 fry. Includes Salmon Brook and tributaries, Burlington Brook, Morgan Brook, and the mainstem.
- Salmon River watershed= 79,220 fry. Includes Dickinson Creek, Jeremy River, Fawn Brook, Pine Brook and mainstem.

Adult Returns Summary

- Total= 32, spring=31, fall= 1
- Leesville=1, Rainbow= 3, West Springfield, 2, Holyoke= 26
- Scales not read yet, no demographic data
- All released to continue upstream
- Upstream distribution- see next page
- Reports of upstream salmon- One fish seen in the Sawmill River in MA and one fish seen in the Fall River in MA.

Egg Taking Data (as of 10/31/14)

- KSFH had a pre-spawn breeding population of 102 females and 99 males, all 3+ domestics.
- Spawning began on 10/23 and as of 10/30 a total of 679,000 eggs have been taken.
- Spawning is expected to be completed by 11/6 with a projected total of 819,000 eggs.
- In comparison, in 2013 KSFH produced 556,600 Atlantic salmon eggs from a spawning population of 77 females and 77 males (all 3+ domestics).

American eel Subcommittee; Steve Gephard (CTDEEP)

In October the ASMFC approved the American Eel Fishery Management Plan Addendum IV. The Addendum establishes a 907,671 pound coast wide quota for yellow eel fisheries, reduces Maine's glass eel quota to 9,688 pounds (2014 landings), and allows for the continuation of New York's silver eel weir fishery in the Delaware River under a transferable license cap, limited to nine permits annually.

Addendum IV provides states/jurisdictions the ability to request limited participation in the glass eel fishery based on conservation programs enacted after January 1, 2011, as long as there is an overall benefit to American eel populations and provides states/jurisdictions the ability to request limited participation in the glass eel fishery based on conservation programs enacted after January 1, 2011, and given there is an overall benefit to American eel populations.

The Board's actions respond to the findings of the 2012 benchmark stock assessment indicating the American eel population in U.S. waters is depleted. The stock has declined in recent decades and the prevalence of significant downward trends in multiple surveys across the coast is cause for concern. Causes of decline are likely due to a combination of factors including historical overfishing, habitat loss,

food web alterations, predation, turbine mortality, environmental changes, toxins and contaminants, and disease.

Fish Passage Subcommittee; John Warner (USFWS)

Connecticut River FERC Relicensings

- Study plans for both the TransCanada and FirstLight Projects have been approved by FERC.
- Studies related to hydraulics, instream flow studies and other studies of the physical environment were completed this summer.
- Due to the Vermont Yankee shutdown, all fish and water quality studies have been postponed to 2015 so that results reflect the post-VY river conditions.
- Consultation with and FirstLight and TransCanada on study details is continuing for 2015.

Holyoke – Connecticut River

- The USFWS, NMFS, MADFW, MDEP CRWC, and TU have agreed with HG&E on a new downstream fish passage facility for the Holyoke Project. The facility includes a new rack/fish screen, upper and lower level fish bypasses that combine all flow to the bascule gate location, a plunge pool for safe egress and design features to improve guidance of shad to the spillway fish lift entrance. Construction is set to begin late this year and be completed by January 2016. Post construction evaluations of the facilities will following in 2016.

Sturgeon Subcommittee; Micah Kieffer (USGS)

Micah gave a presentation covering the Conte Labs recent Shortnose Sturgeon studies later in the meeting (see page 5).

Other Items from the Technical Committee

Fall River Dam Removal is on schedule for early winter.

Chair Hyatt asked if there was anything new to report by the Sea Lamprey Subcommittee as it had been working on a management plan. Melissa Grader (Chair of that subcommittee) noted that there had been limited progress due to other work load issues but that group will be meeting again.

Commissioner Palmer asked if there was any way to determine if any natural reproduction had occurred anywhere from the released adult salmon in the basin. Dr. Slater and Mr. Gephard noted that agency efforts are directed at sampling at the fishway traps, obtaining biological data and scales, that can aid in future determination of potential origins but otherwise only very limited stream surveys are expected for redds, perhaps only by CTDEEP in select stream reaches.

Dr. Alex Haro spoke up on the status of the Green River dams that had included plans that were well developed to remove the first barrier, the Wiley Russell Dam. That plan had ended with the Mayor's decision he would address the repair needs and keep that dam. This decision is a political reversal from earlier years discussions and disappointing to the many people that had invested significant time and large sums of federal dollars on studies and plans to remove that dam over many years. Dr. Slater noted that the MADMF and USFWS have both meet and written the Mayor requesting his consideration to provide fishway passage designs as part of dam rehabilitation program. It is the opinion of the resource agencies that it is more logical to remove the dam for many reasons, including cost to the town, since grant money to repair dams is not available, whereas there are numerous grant sources for dam removal. It was noted that a vocal historic preservation group had argued to keep the structure. Chair Hyatt noted

that is very unfortunate.

A motion was made to accept the Technical Committee Report, it was seconded, and all were in favor.

4. Sturgeon Subcommittee

Commissioner Fisk stated he was interested in starting a discussion on Atlantic sturgeon restoration to see if that was something the Commission might consider. He noted: (1) this was important anadromous species, (2) the species has been considered extirpated in our river and (3) is listed as threatened under ESA in other rivers. The Commissioners agreed that the topic of Atlantic sturgeon restoration in the Connecticut River should start with a review of information on the species' status and trends and related data as well as other information on sturgeon restoration elsewhere. It was recognized that this has the potential to take considerable resources even at early stages of simple consideration and inquiry assessment, so it was requested by Chair Hyatt that an effort to simply identify what information is available and report back to the Commission would be prudent before next steps can be discussed. Commissioner Fisk agreed with this approach. Commissioner MacCallum asked about the status of this species in the Connecticut River. It was noted although the species is formally considered extirpated, the CTDEEP has monitored adult and juvenile Atlantic sturgeon moving into and out of the lower river for many years. These have been assumed to be primarily of Hudson River origin although new studies have suggested that inter-river movements may be more extensive than previously thought. Mr. Gephard noted the CTDEEP recovered a dead 7-foot long Atlantic sturgeon this summer in the lower river and Tom Savoy (CTDEEP/Marine Fisheries Division) had captured several young-of-the year Atlantic sturgeon (first time ever) that would not be expected to migrate from other established populations.

The discussion was followed by a slide presentation from Micah Kieffer (Conte Lab) that reviewed his work with shortnose sturgeon (SNS) in the Connecticut River. He reviewed his limited efforts (due to resources such as receivers and tags) to better understand movements from below Holyoke to the Holyoke Dam and how/when/conditions/ the fish move at that dam and fishways. One example is a tagged fish's movements in the tailrace area and in the spillways areas and movement that occurred in fall months. Sample sizes were very limited. He reviewed movement history of tracked fish that provided limited insights due to the number of fish. Many questions remain that are of interest to managers. He hopes to tag more fish in 2015 to gain more information on fish passage issues. He has also worked on lab experiments at Conte Lab with Dr. Haro on SNS behavior with respect to different fishway entrance designs. Tests showed a clear negative effect on passage attempts with an increase in water velocities. It was noted that surface and submerged orifice entrances worked equally well (depth of flume was limited to < 10ft).

Mr. Kieffer shared his thoughts on some needed research on SNS that would address questions on upstream passage measures, timing and details of upstream movements, and juvenile life stages (movements/passage measures/habitat use/etc). When conditions change at Holyoke Dam it will be important to understand SNS movements for both juveniles and adults and both and downstream passage. While draft study plans to evaluate the new downstream passage structure and operations at Holyoke Dam following 2015 construction are under review for shad and eel, they have yet to be drafted for SNS. Mr. Sprankle asked who is funding his work. Mr. Kieffer noted they had received some NOAA funding in the past from the Northeast Regional Office but not recently. Dr. Haro stated the lab experiments are funded by Gulf of Maine Section 6 money and that the Southeast NOAA Regional Office also has recently supported their work with SNS.

Chair Hyatt made a motion to charge the Technical Committee and its Sturgeon Subcommittee to gather the types of information previously discussed and report back to the Commissioners at the next CRASC

meeting. The motion was seconded, and all were in favor.

5. Connecticut River Pilot for Landscape Conservation Cooperative Program

Andrew Milliken (USFWS) who leads the North Atlantic LCC Program, described the goal and objectives of the LCC and this Pilot Program. He noted that Mr. Sprankle and John Warner (USFWS), Tim Wildman (CTDEEP) and Andrew Fisk (CRWC) are CRASC partners who are serving on the aquatic group for this Pilot. Representatives from many agencies and NGOs and UMASS researchers were brought together to review existing data sets that are focused on key representative species, habitat types (ecosystems), and both habitat and species together. Mapping and modeling tools have been developed that include variables of influence to show how changes in key variable such as projected development are reflected in a spatial context and over time. These are designed to aid efforts to manage and protect habitats and or species on a landscape scale. For fishes, brook trout has been identified as a priority species and modeling that covers headwater streams has been conducted. For CRASC interests, American shad, blueback herring, SNS, sea lamprey, and alewife have also been identified as priority species, in addition to brook trout. Due to a lack of modeling data for anadromous fishes, an approach was developed to identify where these species currently occur and include them in the Pilot. Aquatic classification includes 26 stream types which includes size and temperature classification from TNC modeling. Dams are included in maps and culverts will soon be added. Data on impervious surfaces are also included.

Chair Hyatt thanked Mr. Milliken and noted that this effort should be helpful and requested that this effort continue to work with CRASC members.

6. CRASC History, documentation of the Salmon Program (Sprankle)

Mr. Sprankle referred the Commissioners to notes on a meeting held in September on this topic with Commissioner McInnes, Fisk and himself. Highlights of the meeting include their conclusion that the target audience is broad based and thus affects design and information. It was suggested that this history not be too lengthy, perhaps under 100 pages. One suggested approach was to make it a web-based document so it would be more accessible and could lead to other information via links, if readers were interested. In addition, the document should not only reflect on the past but also touch on current and future. It can serve other purposes in that design that will be beneficial to CRASCs work. Commissioner MacCallum agreed the web based approach sounded good but he wanted to ensure the narrative captures important elements and history, there is much to cover. Commissioner Palmer suggested including interviews with older professionals that can still speak on the early years of the effort such as Commissioner Robert Jones from Connecticut. Commissioner Fisk asked where the money for such a project would come from. Chair Hyatt thought there are some potential sources of funds and NOAA had stated in an earlier meeting they have a program to document historical management activities.

7. Other Business

There was no other business noted. Chair Hyatt the CRASC members to join up for group pictures with Commissioner MacCallum immediately afterwards.

Meeting adjourned at 12:33PM